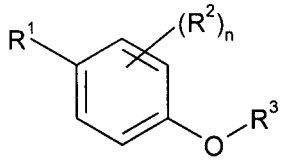
Amendments to the Claims

This listing of claims will replace all prior versions and listings of the claims in the application:

What is claimed is:

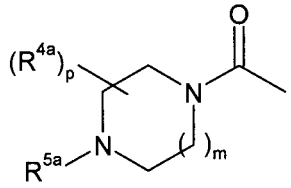
1. (Currently Amended) A compound of formula (I) or a pharmaceutically acceptable salt thereof:



(I)

wherein:

R^1 represents a group of formula (A):



(A)

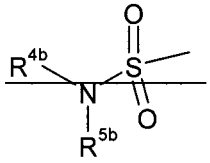
wherein R^{4a} represents C_{1-6} alkyl, oxo, aryl, heteroaryl or heterocyclyl;

R^{5a} represents hydrogen, -C_{1-6} alkyl, -C_{1-6} alkylC_{1-6} alkoxy, -C_{1-6} alkoxycarbonyl, -C_{3-8} cycloalkyl, -aryl, -heterocyclyl, heteroaryl, -C_{1-6} alkyl-aryl, -CH(aryl)(aryl), -C_{1-6} alkyl-C_{3-8} cycloalkyl, -C_{1-6} alkyl-heteroaryl or -C_{1-6} alkyl-heterocyclyl, wherein R^{5a} may be optionally substituted by one or more substituents which may be the same or different, and which are selected from the group consisting of halogen, hydroxy, cyano, nitro, oxo, haloC_{1-6} alkyl, polyhaloC_{1-6} alkyl, haloC_{1-6} alkoxy, polyhaloC_{1-6} alkoxy, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} alkylthio, C_{1-6} alkoxyC_{1-6} alkyl, C_{3-7} cycloalkylC_{1-6} alkoxy, C_{1-6} alkanoyl, C_{1-6} alkoxycarbonyl, C_{1-6} alkylsulfonyl, C_{1-6} alkylsulfinyl, C_{1-6} alkylsulfonyloxy, C_{1-6} alkylsulfonylC_{1-6} alkyl, C_{1-6} alkylsulfonamidoC_{1-6} alkyl, C_{1-6} alkylamidoC_{1-6} alkyl or a group $NR^{15a}R^{16a}$, -$CONR^{15a}R^{16a}$, -$NR^{15a}COR^{16a}$, -$NR^{15a}SO_2R^{16a}$ or -$SO_2NR^{15a}R^{16a}$, wherein R^{15a} and R^{16a} independently represent hydrogen, C_{1-6} alkyl, aryl or together with the nitrogen to which they are attached may form a nitrogen containing heterocyclyl group;

m is 1 ~~or 2~~;

p is 0, 1, 2 or 3, or when p represents 2, said R^{4a} groups may instead form a bridging group consisting of one or two methylene groups;

~~or R^1 represents a group of formula (B):~~

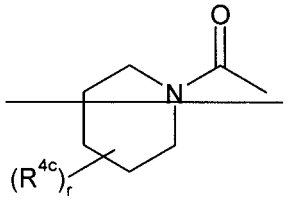


~~(B)~~

~~wherein $NR^{4b}R^{5b}$ represents an N-linked -heterocyclyl, -heterocyclyl-X^b-aryl, -heterocyclyl-X^b-heteroaryl, -heterocyclyl-X^b-heterocyclyl, -heteroaryl, -heteroaryl-X^b-aryl, -heteroaryl-X^b-heteroaryl or -heteroaryl-X^b-heterocyclyl group; wherein said aryl, heteroaryl and heterocyclyl groups of $NR^{4b}R^{5b}$ may be optionally substituted by one or more substituents which may be the same or different, and which are selected from the group consisting of halogen, hydroxy, cyano, nitro, oxo, haloC_{1-6} alkyl, polyhaloC_{1-6} alkyl, haloC_{1-6} alkoxy, polyhaloC_{1-6} alkoxy, C_{1-6} alkyl, C_{1-6} alkoxy, arylC_{1-6} alkoxy, C_{1-6} alkylthio, C_{1-6} alkoxyC_{1-6} alkyl, C_{3-7} cycloalkylC_{1-6} alkoxy, C_{1-6} alkanoyl, C_{1-6} alkoxycarbonyl, arylC_{1-6} alkyl, heteroarylC_{1-6} alkyl, C_{1-6} alkylsulfonyl, C_{1-6} alkylsulfinyl, C_{1-6} alkylsulfonyloxy, C_{1-6} alkylsulfonylC_{1-6} alkyl, arylsulfonyl, arylsulfonyloxy, arylsulfonylC_{1-6} alkyl, aryloxy, C_{1-6} alkylsulfonamidoC_{1-6} alkyl, C_{1-6} alkylamidoC_{1-6} alkyl, arylsulfonamido, arylaminosulfonyl, arylsulfonamidoC_{1-6} alkyl, arylcarboxamidoC_{1-6} alkyl, aroylC_{1-6} alkyl, arylC_{1-6} alkanoyl, or a group $-NR^{15b}R^{16b}$, $-CONR^{15b}R^{16b}$, $-NR^{15b}COR^{16b}$, $-NR^{15b}SO_2R^{16b}$ or $-SO_2NR^{15b}R^{16b}$, wherein R^{15b} and R^{16b} independently represent hydrogen or C_{1-6} alkyl;~~

~~X^b represents a bond, CO, NHCO or CONH;~~

~~or R^1 represents a group of formula (C):~~

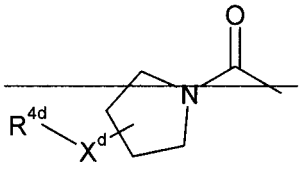


(C)

wherein R^{4c} represents C_{1-6} alkyl, OH, aryl or heterocyclyl, wherein said aryl and heterocyclyl groups may be optionally substituted by halogen, C_{1-6} alkyl, C_{1-6} alkoxy, cyano, amino, oxo, trifluoromethyl or an aryl group;

r is 0, 1 or 2;

or R^1 represents a group of formula (D):

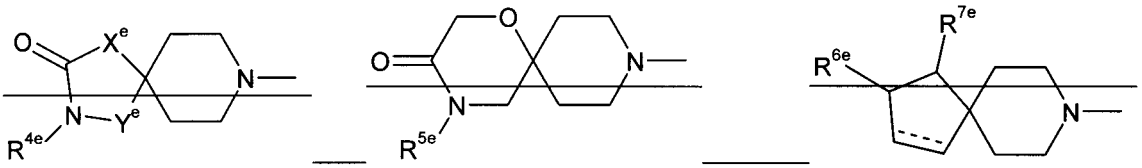


(D)

wherein R^{4d} represents aryl or heteroaryl wherein said aryl and heteroaryl groups may be optionally substituted by one or more substituents which may be the same or different, and which are selected from the group consisting of halogen, C_{1-6} alkyl, C_{1-6} alkoxy, cyano, amino or trifluoromethyl;

X^d represents a bond or NHCO, such that when X^d represents NHCO, the group R^{4d}-X^d is attached at the 3-position of the pyrrolidinyl ring;

or R^1 represents a group of formula –CO-E, wherein E represents a group of formula E^a, E^b or E^c:



(E^a) (E^b) (E^c)

wherein X^e represents O or N-R^{8e};

Y^e represents –C(HR^{9e})- or –C(=O)-;

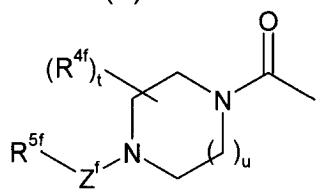
R^{4e}, R^{5e}, R^{8e} and R^{9e} independently represent hydrogen, C_{1-6} alkyl, aryl, heteroaryl, -C_{1-6} alkyl-aryl or -C_{1-6} alkyl-heteroaryl;

R^{6e} and R^{7e} independently represent hydrogen, C_{1-6} alkyl, aryl, heteroaryl, -C_{1-6} alkyl-aryl, -C_{1-6} alkyl-heteroaryl or R^{6e} and R^{7e} together with the carbon atoms to which they are attached may form a benzene ring;

═══ is a single or double bond;

~~wherein said aryl or heteroaryl groups of R^{4e}, R^{5e}, R^{6e}, R^{7e}, R^{8e} and R^{9e} may be optionally substituted by one or more substituents which may be the same or different, and which are selected from the group consisting of C_{1-6} alkyl, CF_3, C_{1-6} alkoxy, halogen, cyano, sulfonamide or C_{1-6} alkylsulfonyl;~~

or R^1 represents a group of formula (F):



(F)

wherein t is 0, 1 or 2;

u is 1 or 2;

R^{4f} represents C_{1-6} alkyl or when t represents 2, said R^{4f} groups may instead form a bridging group consisting of one or two methylene groups;

R^{5f} represents -C_{1-6} alkyl, -C_{1-6} alkylC_{1-6} alkoxy, -C_{3-8} cycloalkyl, aryl, heterocyclyl, heteroaryl, -C_{1-6} alkyl-aryl, -C_{1-6} alkyl-C_{3-8} cycloalkyl, -C_{1-6} alkyl-heteroaryl, -C_{1-6} alkyl-heterocyclyl, -aryl-aryl, -aryl-heteroaryl, -aryl-heterocyclyl, -heteroaryl-aryl, -heteroaryl-heteroaryl, -heteroaryl-heterocyclyl, -heterocyclyl-aryl, -heterocyclyl-heteroaryl or -heterocyclyl-heterocyclyl;

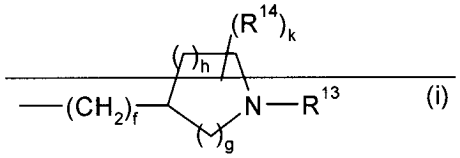
wherein R^{5f} may be optionally substituted by one or more substituents which may be the same or different, and which are selected from the group consisting of halogen, hydroxy, cyano, nitro, oxo, haloC_{1-6} alkyl, polyhaloC_{1-6} alkyl, haloC_{1-6} alkoxy, polyhaloC_{1-6} alkoxy, C_{1-6} alkyl, C_{1-6} alkoxy, C_{1-6} alkylthio, C_{1-6} alkoxyC_{1-6} alkyl, C_{3-7} cycloalkylC_{1-6} alkoxy, C_{1-6} alkanoyl, C_{1-6} alkoxycarbonyl, C_{1-6} alkylsulfonyl, C_{1-6} alkylsulfinyl, C_{1-6} alkylsulfonyloxy, C_{1-6} alkylsulfonylC_{1-6} alkyl, C_{1-6} alkylsulfonamidoC_{1-6} alkyl, C_{1-6} alkylamidoC_{1-6} alkyl, arylsulfonyl, arylsulfonyloxy, aryloxy, arylsulfonamido, arylcarboxamido, aroyl, or a group $NR^{15f}R^{16f}$, -$CONR^{15f}R^{16f}$, -$NR^{15f}COR^{16f}$, -$NR^{15f}SO_2R^{16f}$ or -$SO_2NR^{15f}R^{16f}$, wherein R^{15f} and R^{16f} independently represent hydrogen or C_{1-6} alkyl or together form a heterocyclic ring;

Z^f represents CO or SO_2;

R^2 represents halogen, C_{1-6} alkyl, C_{1-6} alkoxy, cyano, amino or trifluoromethyl;

n is 0, 1 or 2;

R^3 represents $-(CH_2)_q-NR^{11}R^{12}$ ~~or a group of formula (i):~~



(i)

wherein q is 2, 3 or 4;

R^{11} and R^{12} ~~independently represent C_{1-6} alkyl or~~ together with the nitrogen atom to which they are attached represent ~~an N-linked heterocyclic group selected from pyrrolidine,~~ piperidine ~~and homopiperidine~~ optionally substituted by one or two R^{17} groups;

~~R^{13} represents C_{1-6} alkyl, C_{3-6} cycloalkyl or C_{1-4} alkyl-C_{3-6} cycloalkyl;~~

~~R~~^{14} and R^{17} independently represents halogen, C_{1-6} alkyl, haloC_{1-6} alkyl, OH, diC_{1-6} alkylamino or C_{1-6} alkoxy;

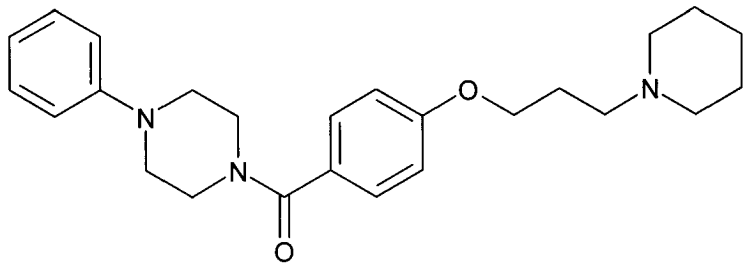
~~f and k independently represent 0, 1 or 2;~~

~~g is 0, 1 or 2 and h is 0, 1, 2 or 3, such that g and h cannot both be 0;~~

~~or solvates thereof~~.

2. (Currently Amended) A compound according to claim 1 which is a compound selected from the group consisting of

E1



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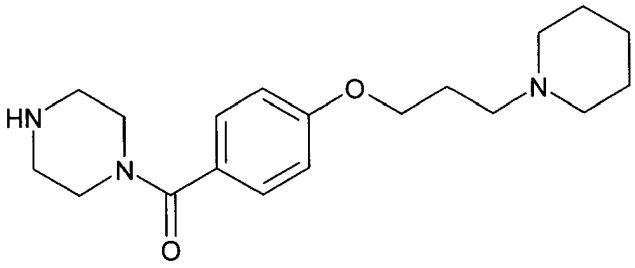

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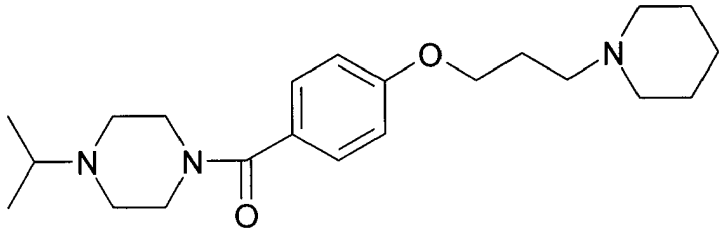

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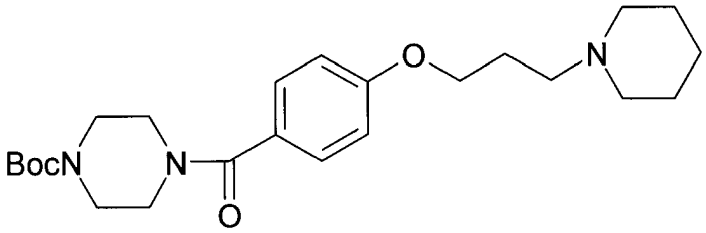

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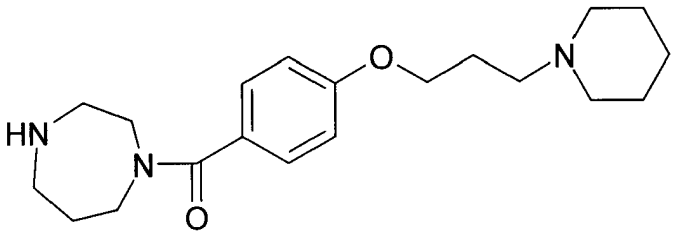

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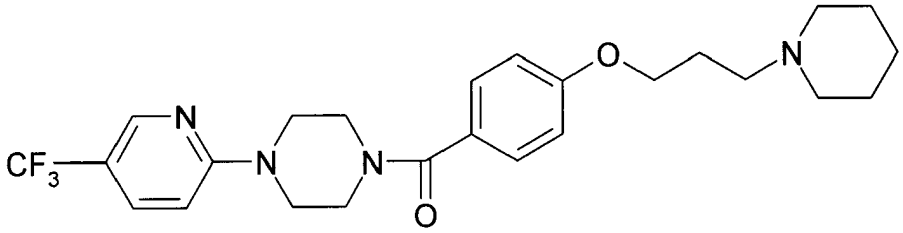

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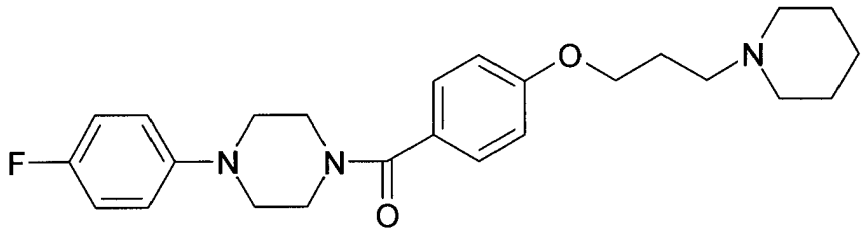

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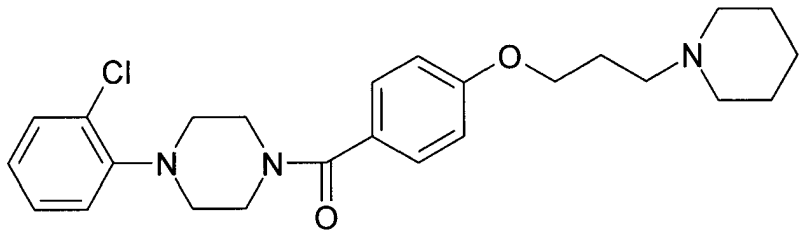

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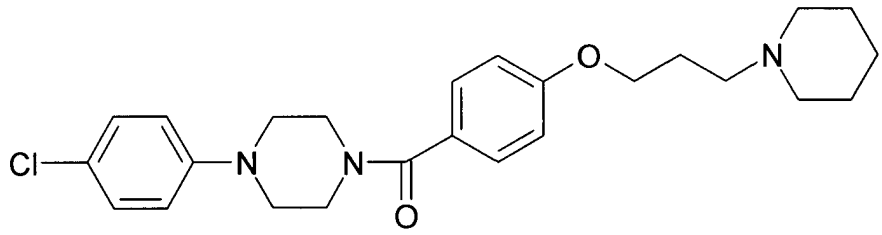

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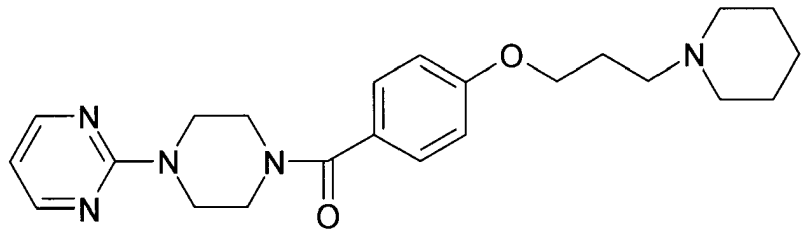

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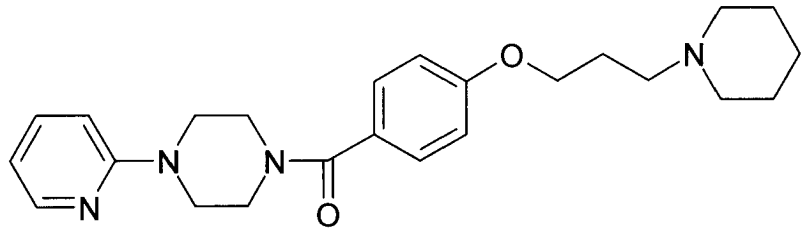

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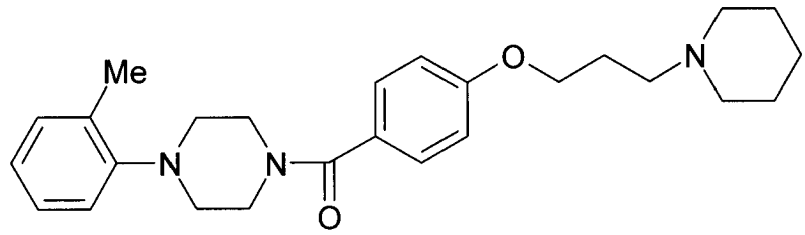

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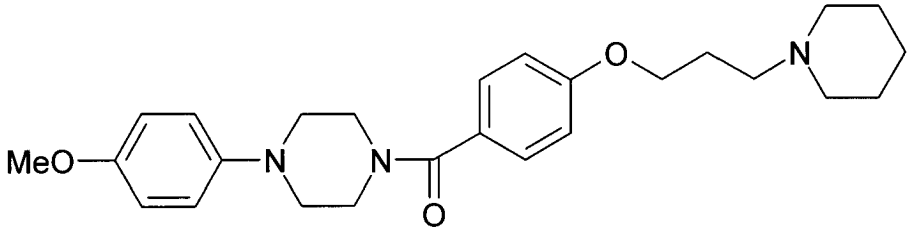

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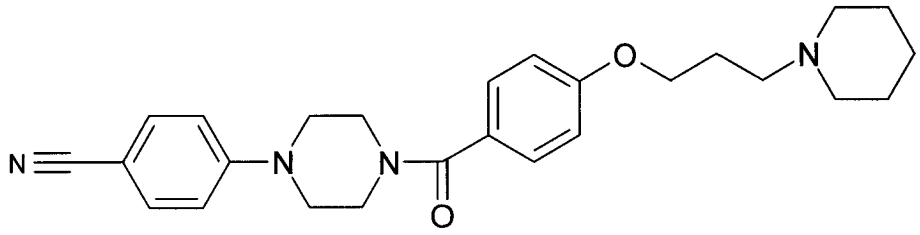

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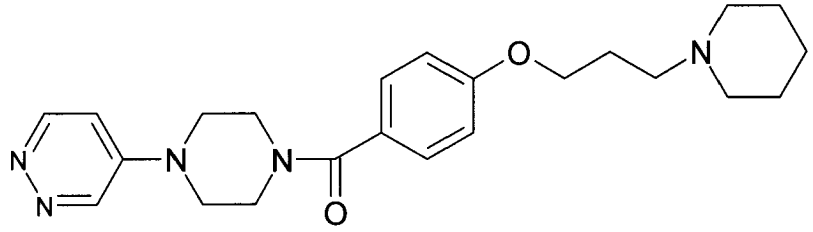

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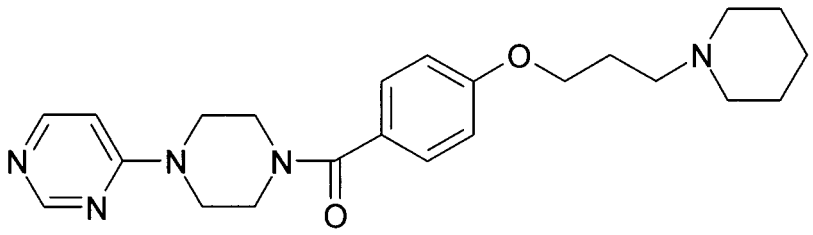

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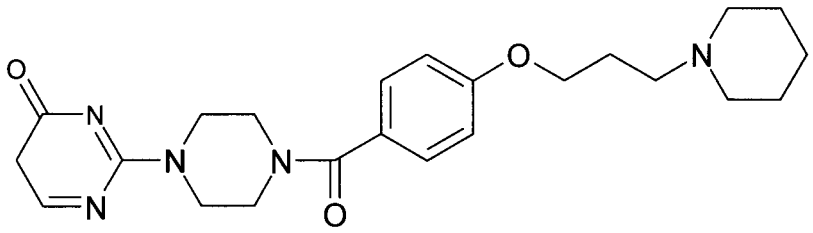

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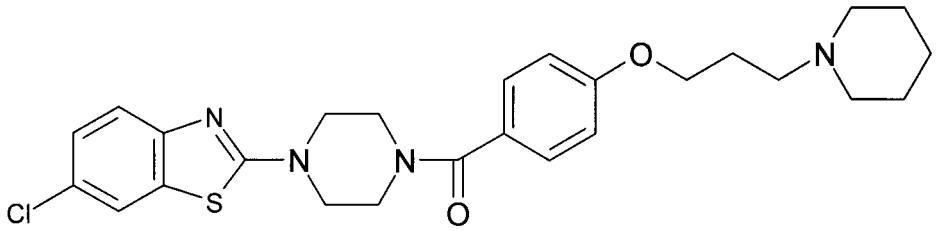

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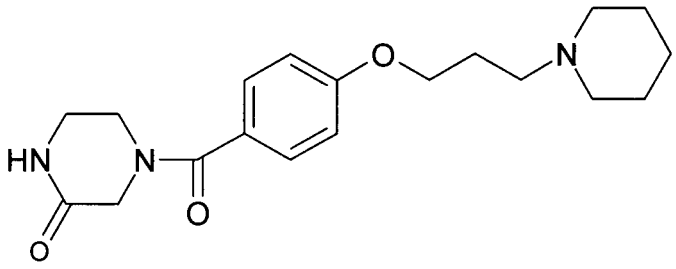

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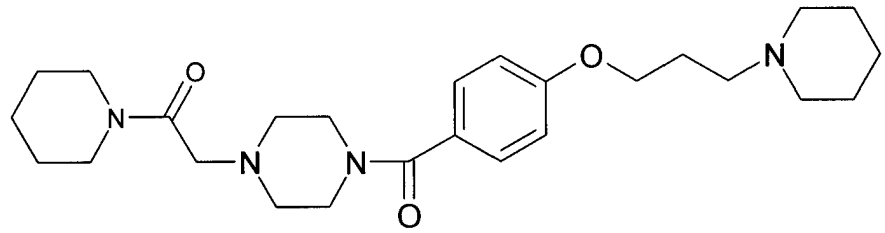

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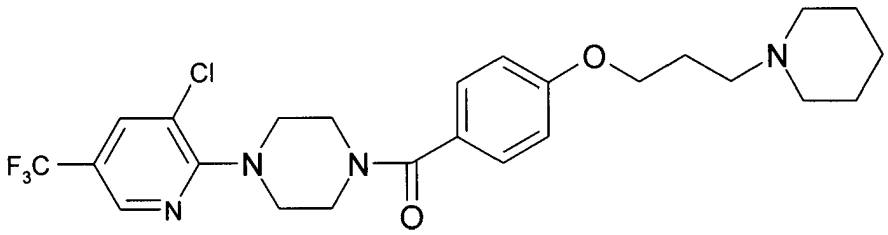

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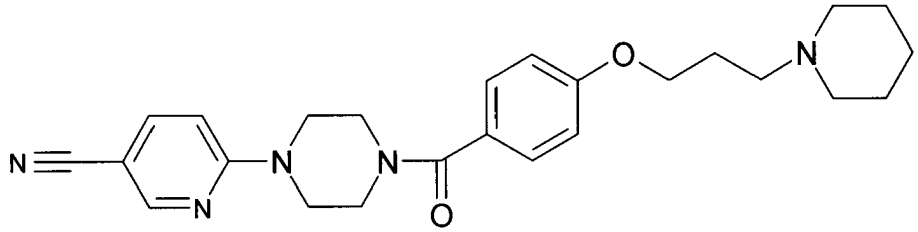

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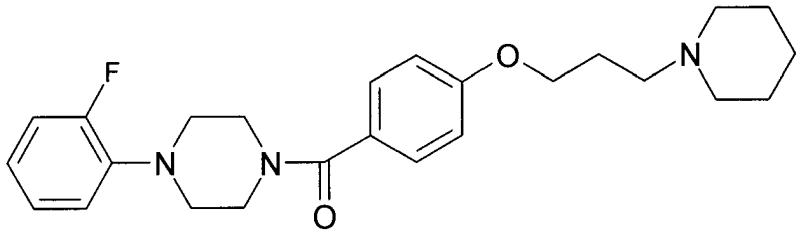

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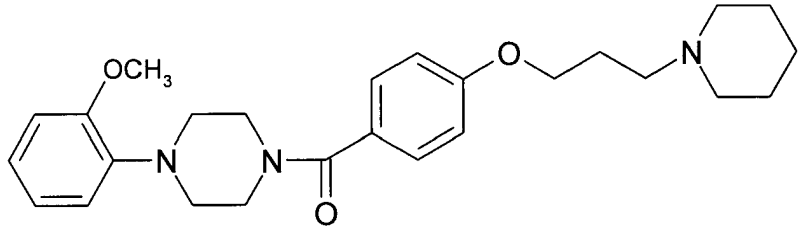

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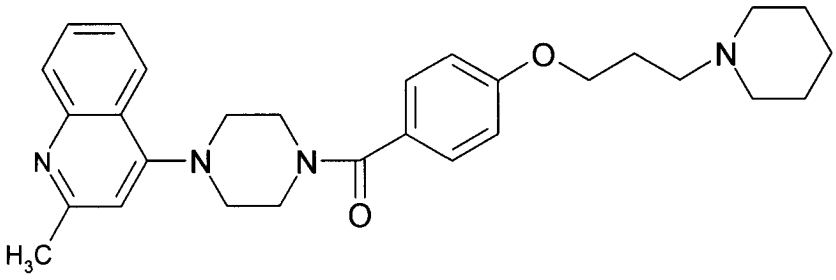

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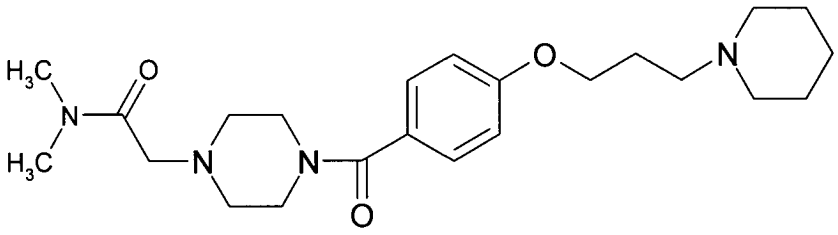

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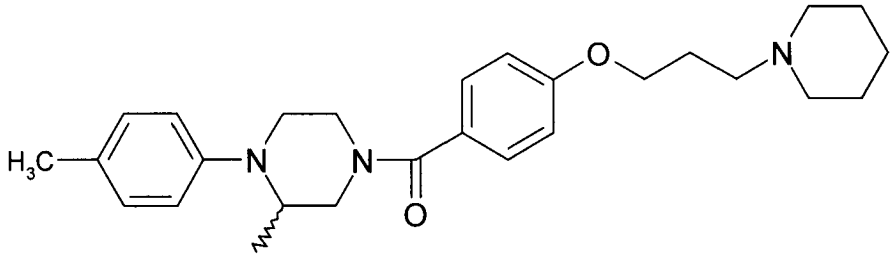

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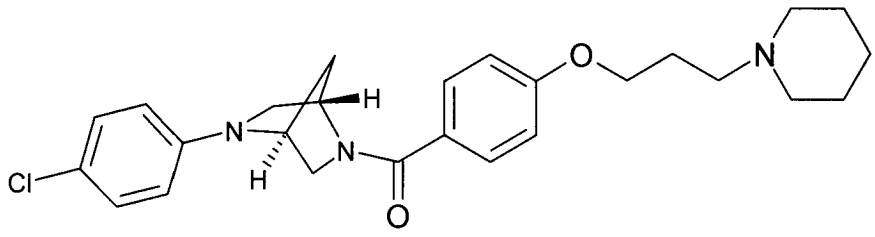

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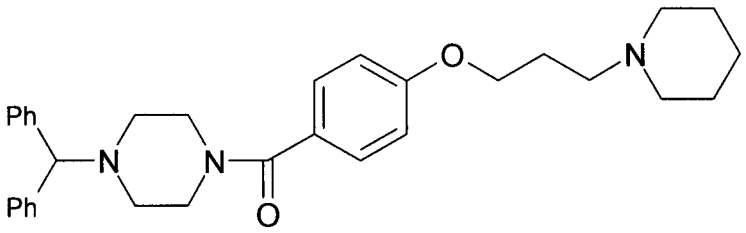

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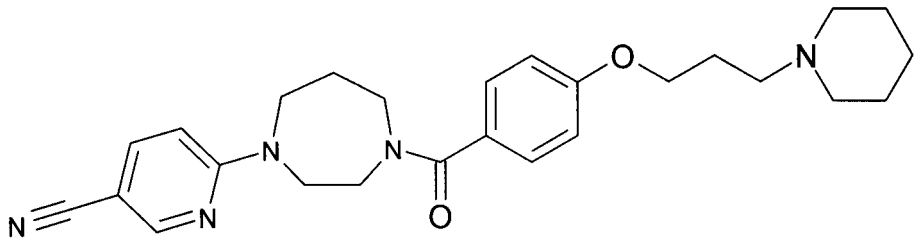

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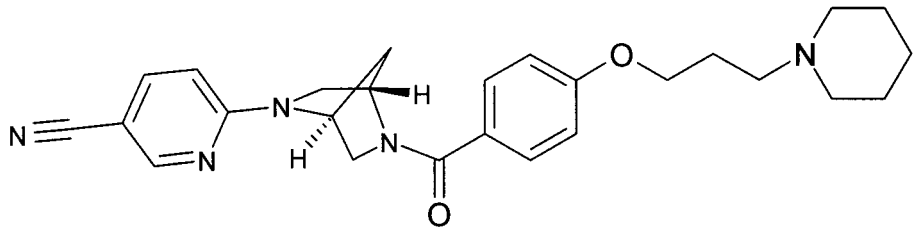

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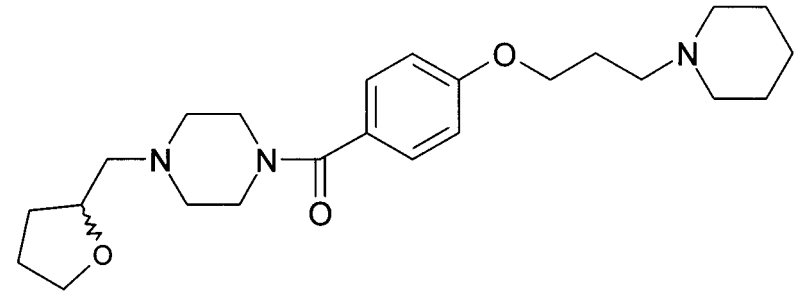

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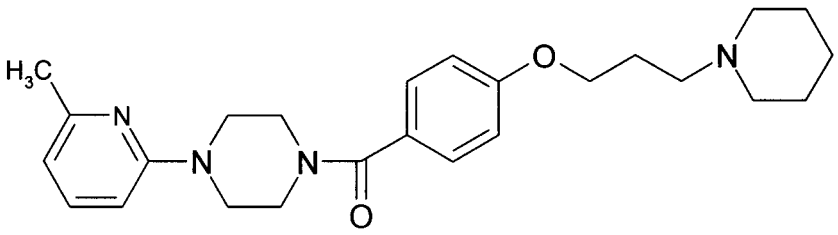

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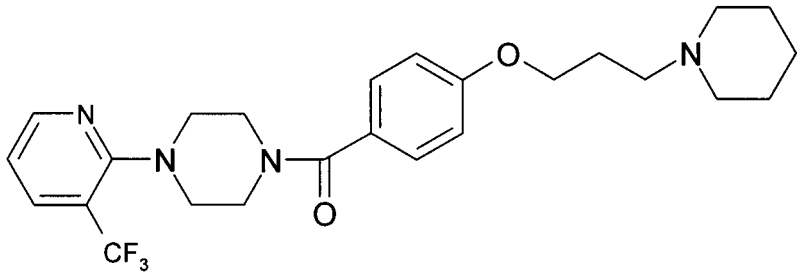

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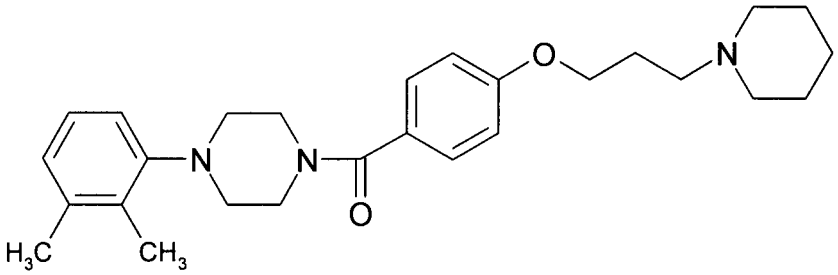

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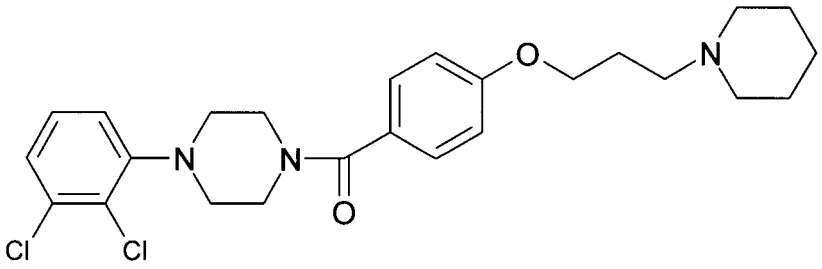

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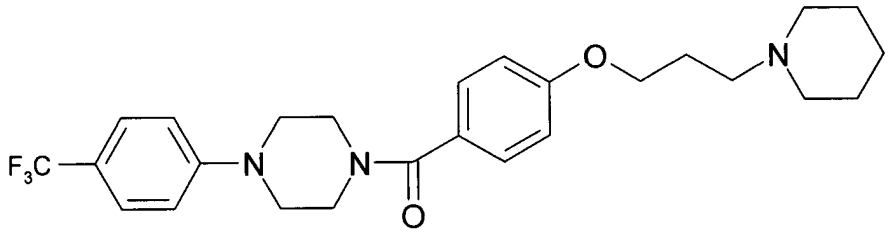

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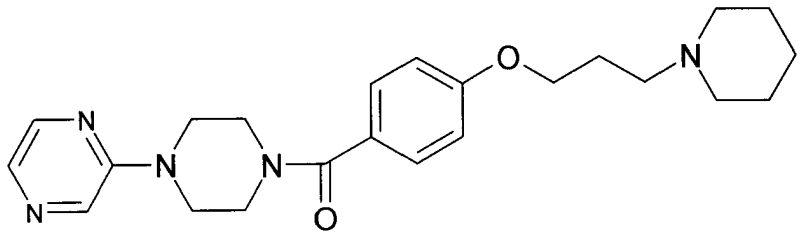

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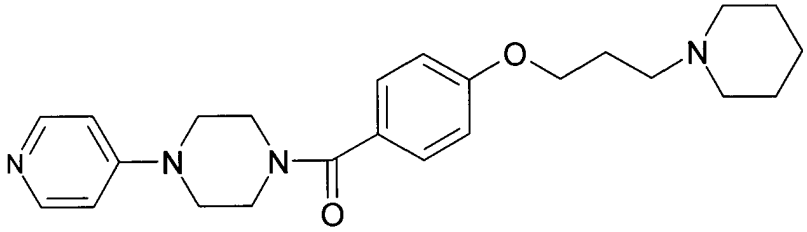

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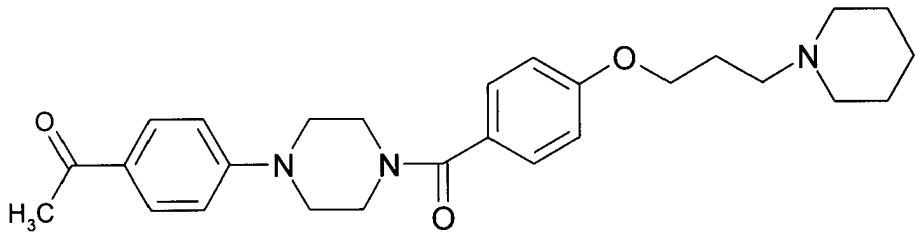

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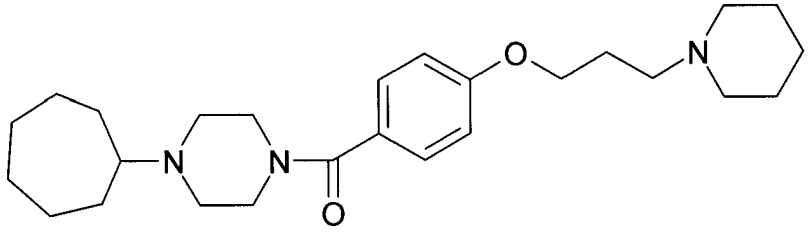

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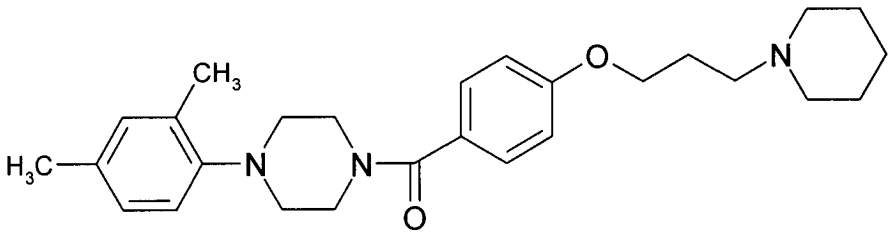

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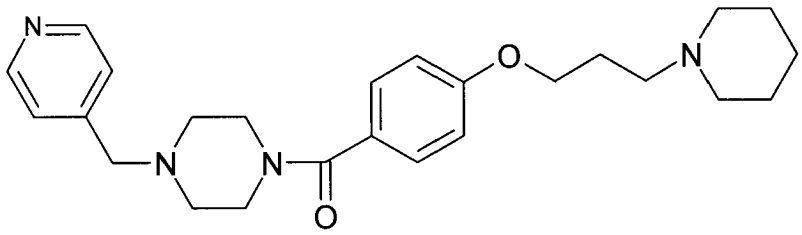

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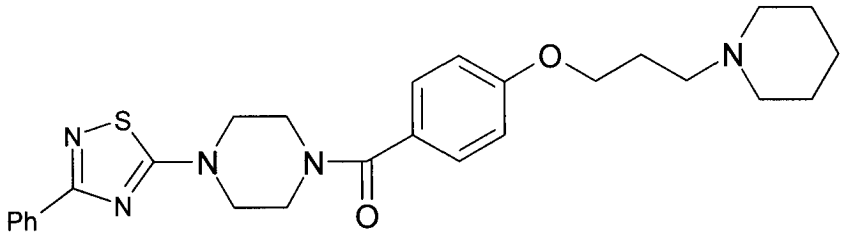

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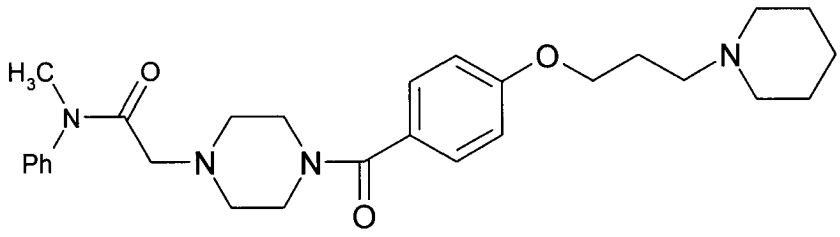

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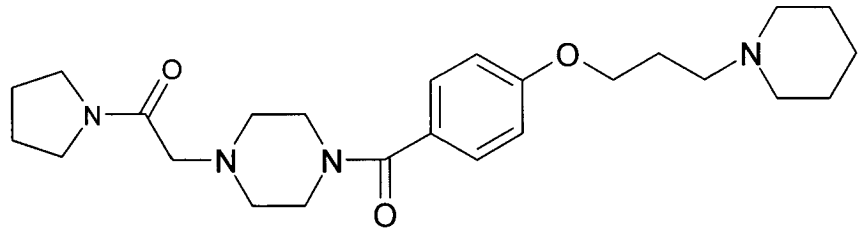

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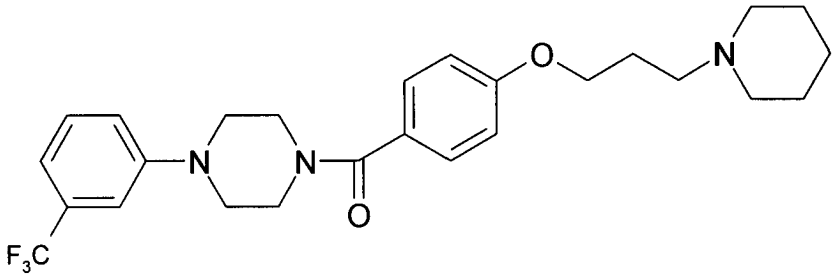

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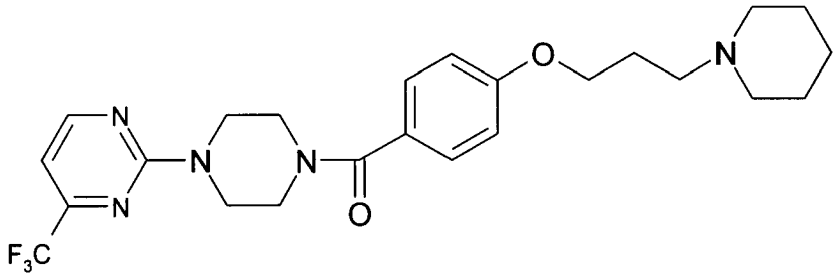

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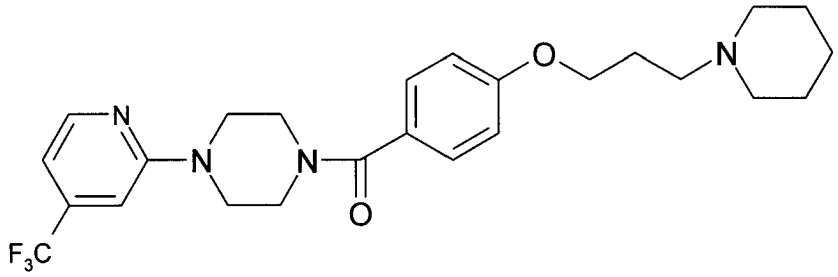

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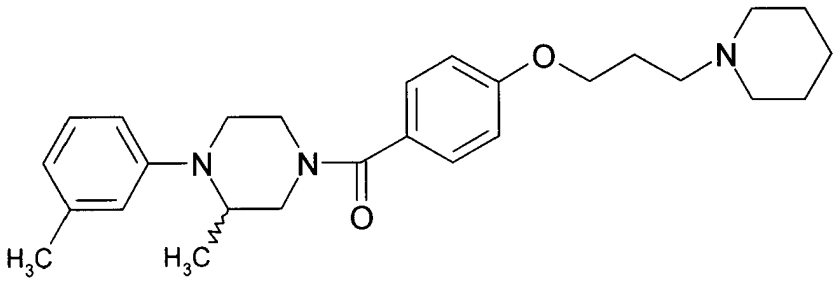

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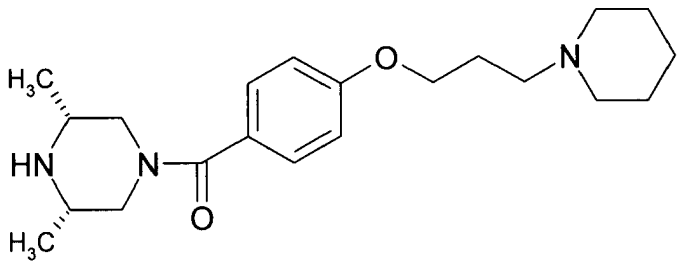

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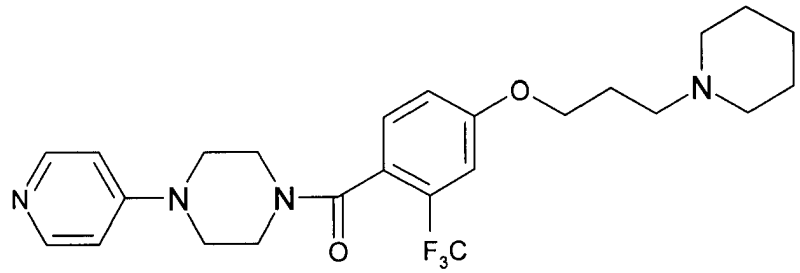

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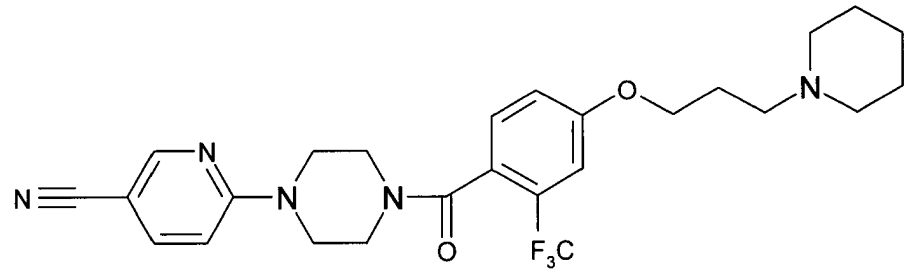

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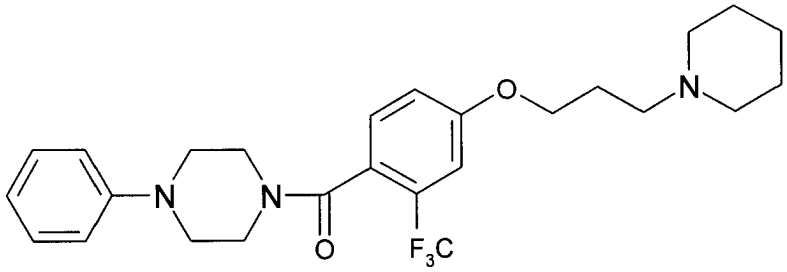

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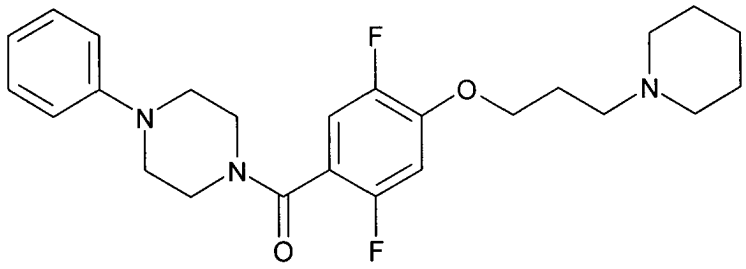

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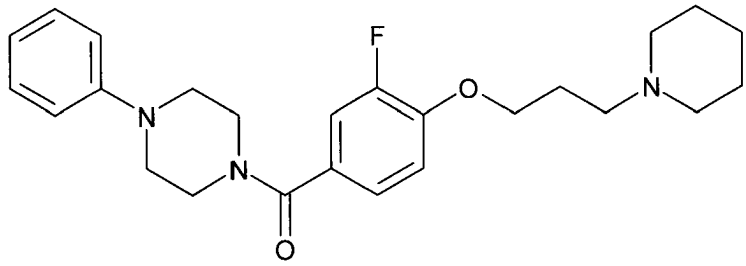

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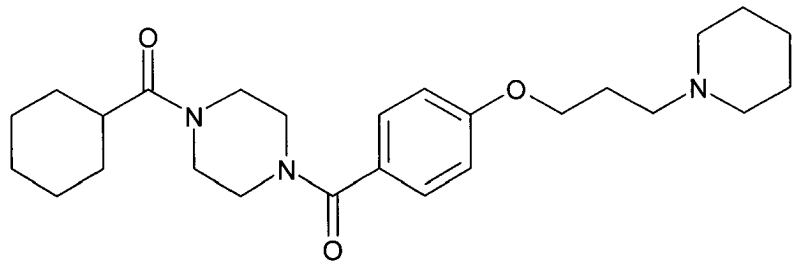

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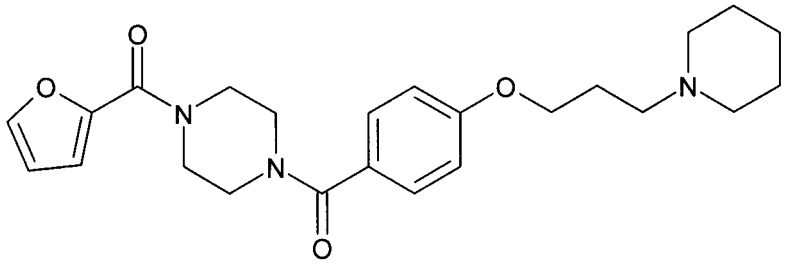

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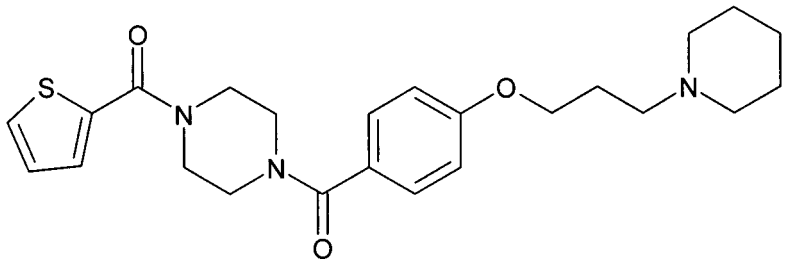

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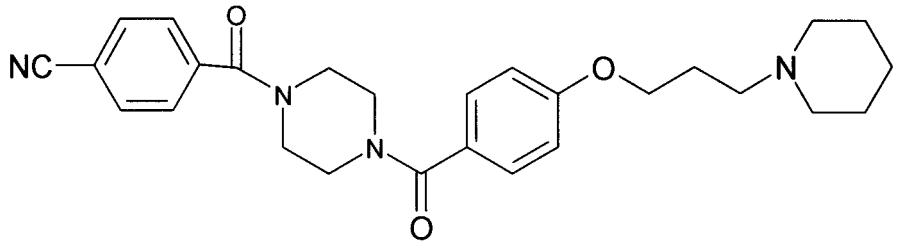

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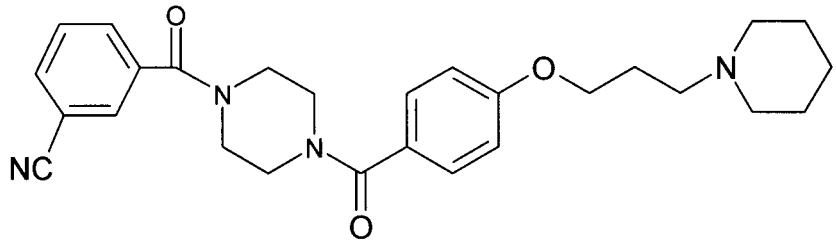

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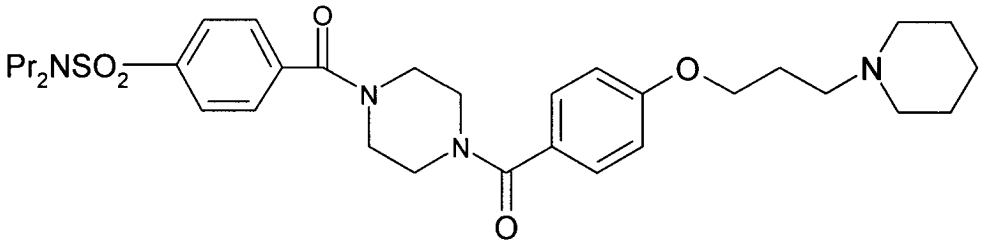

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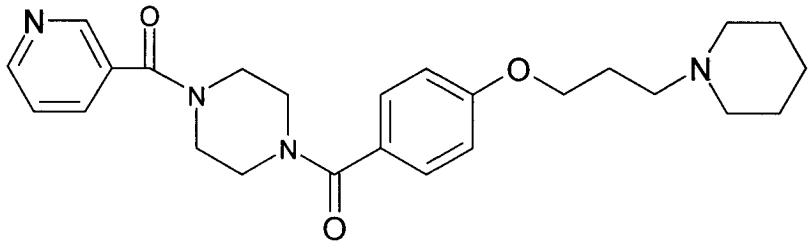

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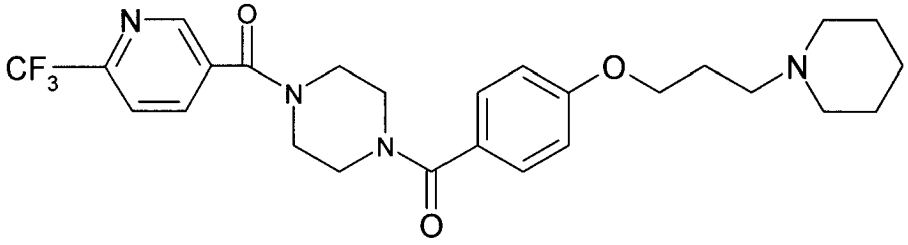

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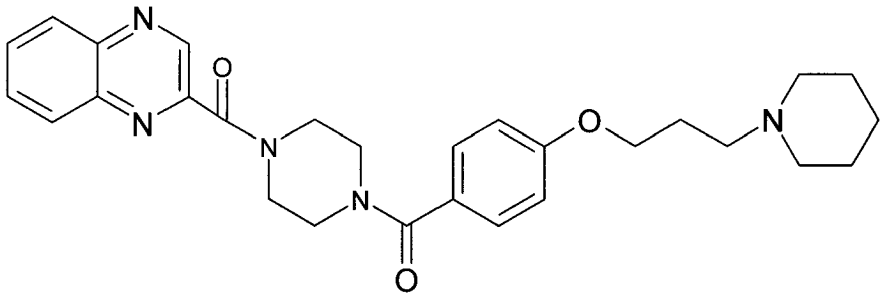

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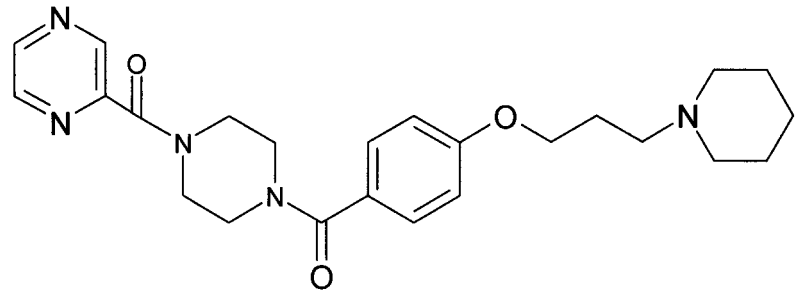

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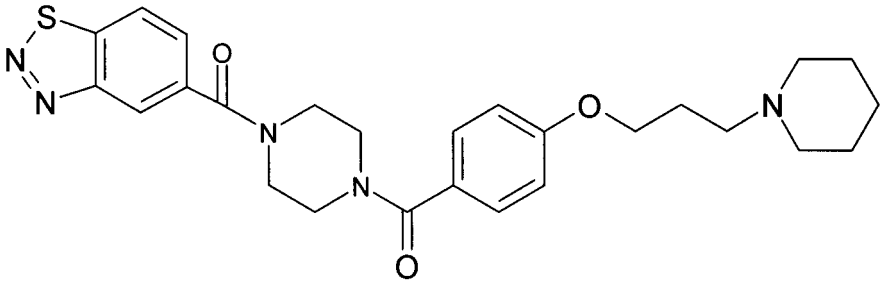

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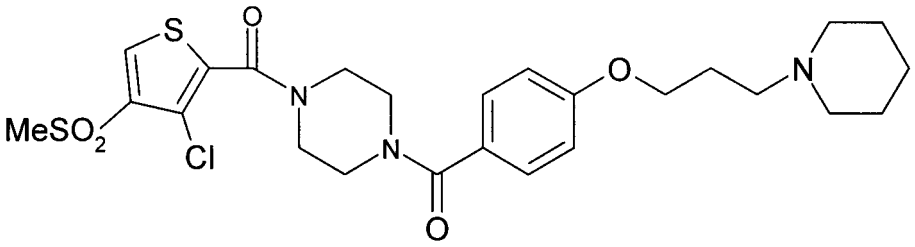

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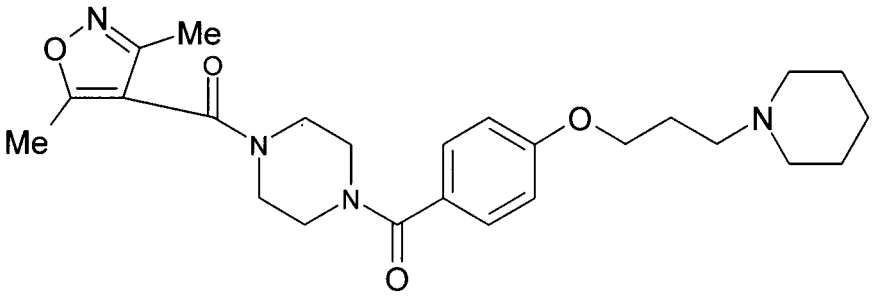

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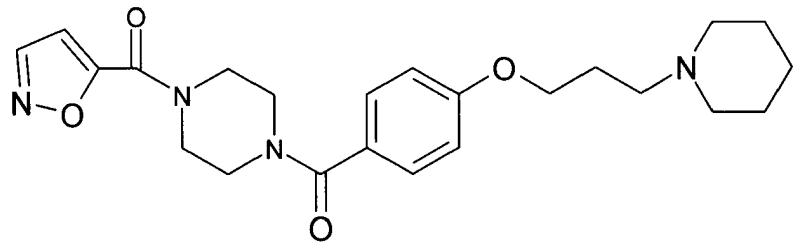

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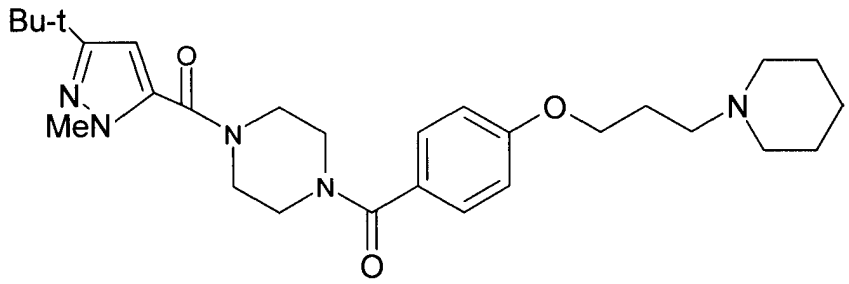

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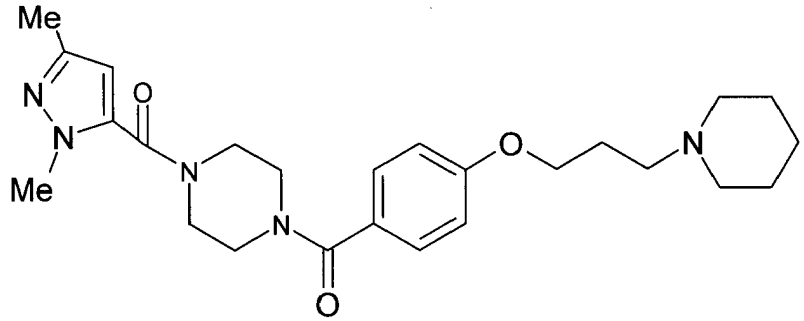

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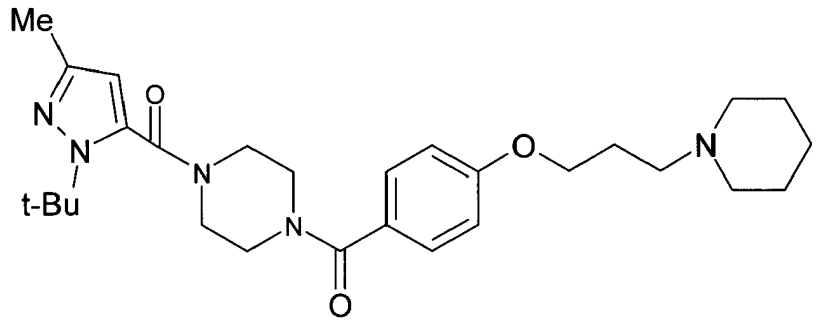

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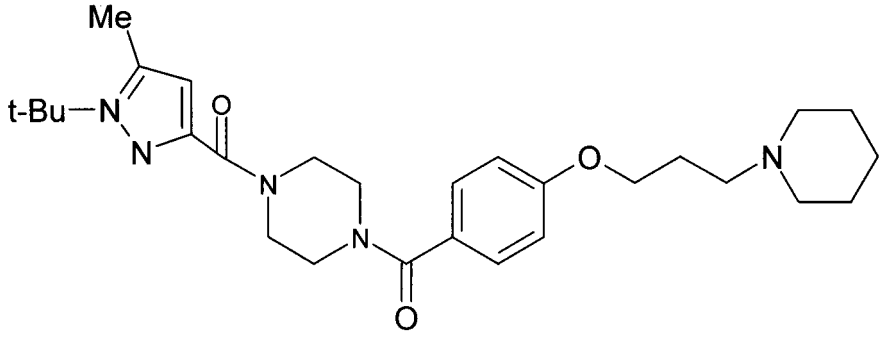

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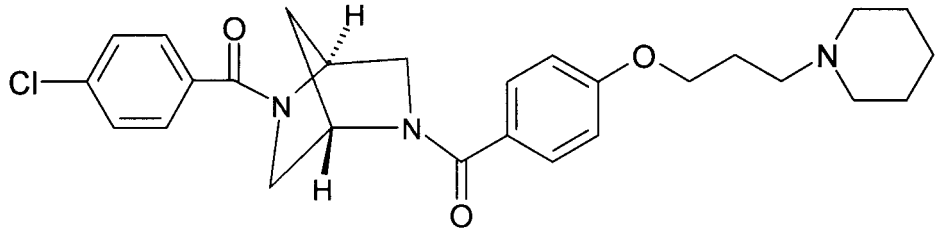

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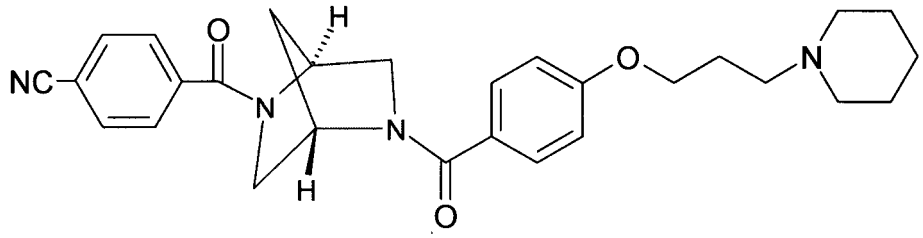

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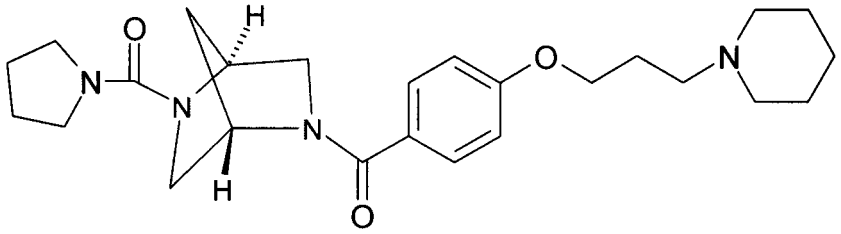

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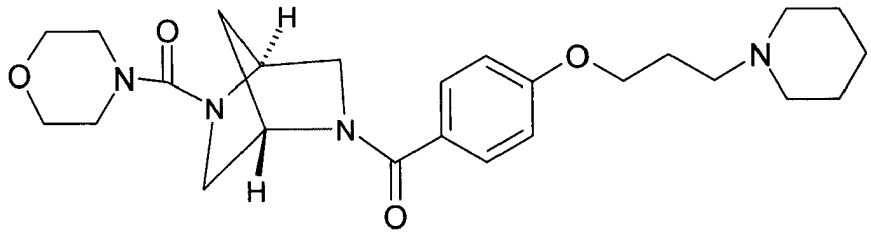

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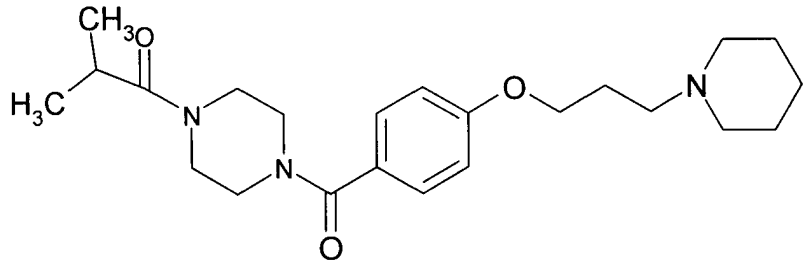

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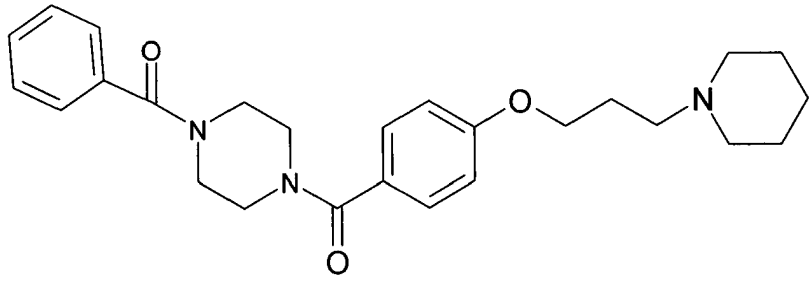

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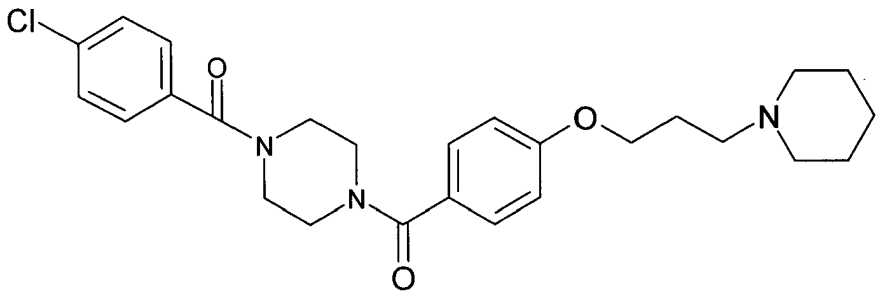

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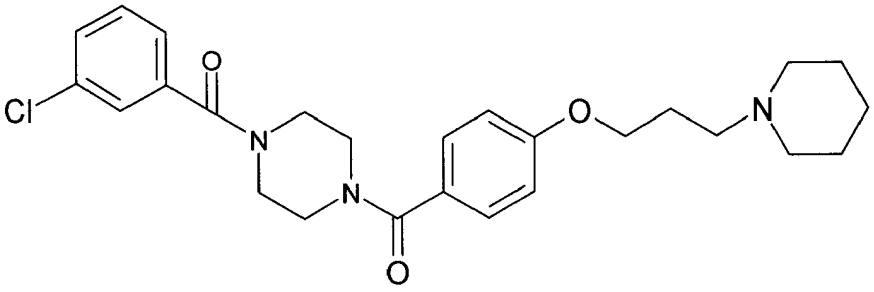

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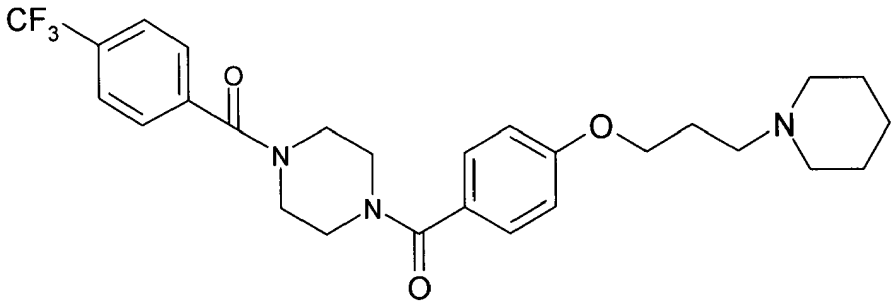

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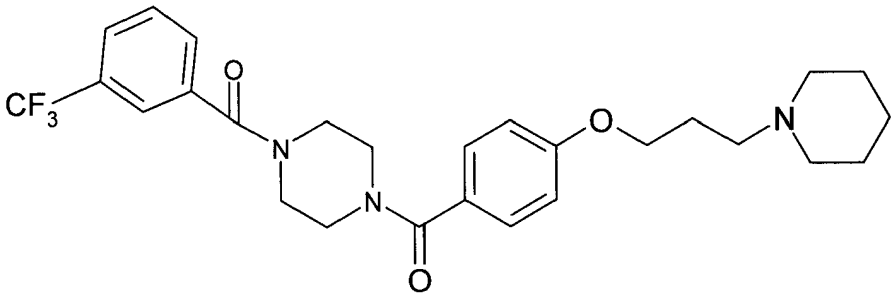

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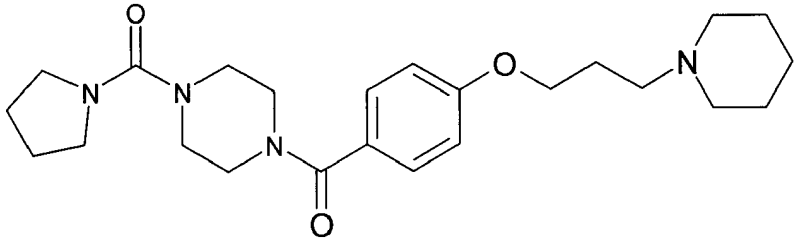

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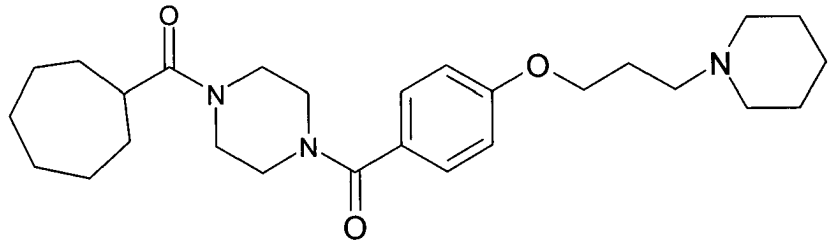

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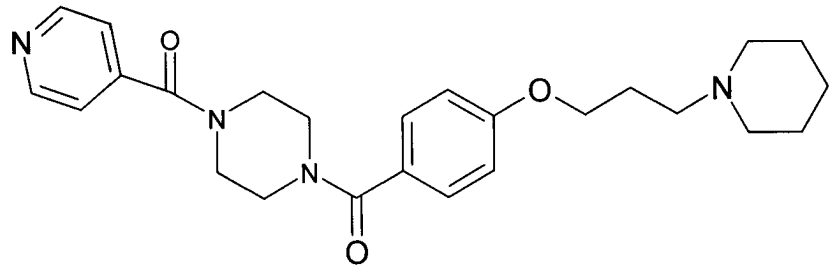

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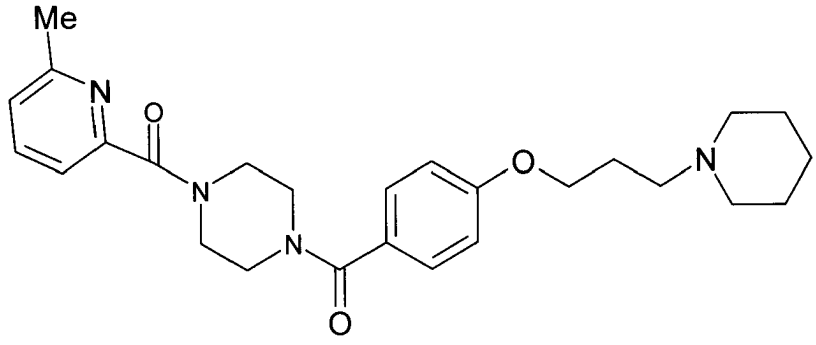

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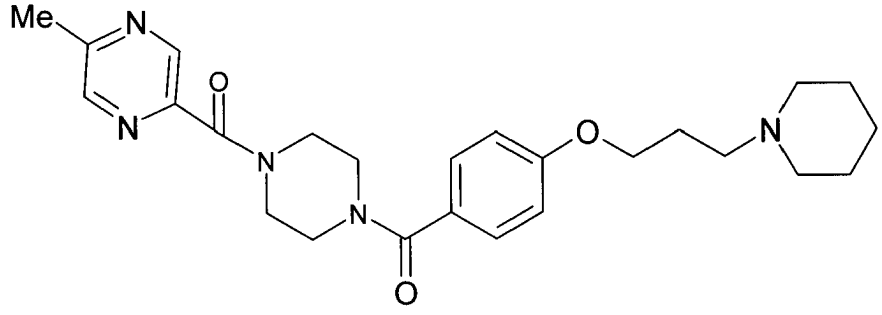

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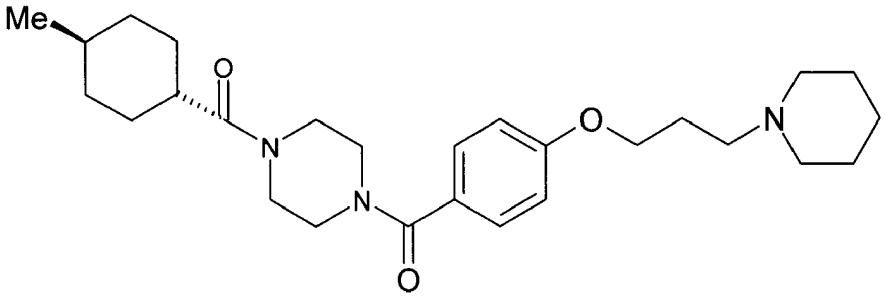

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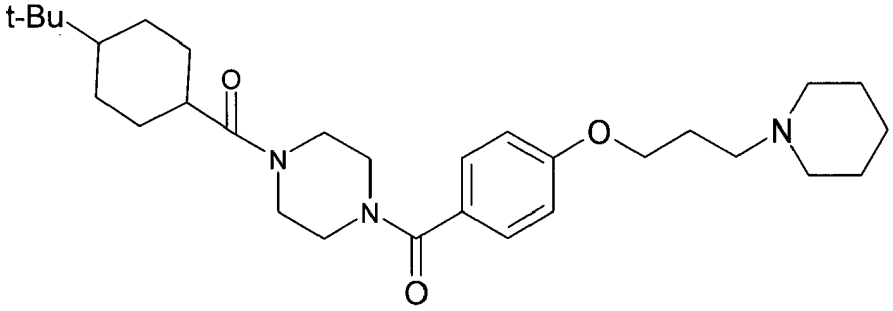

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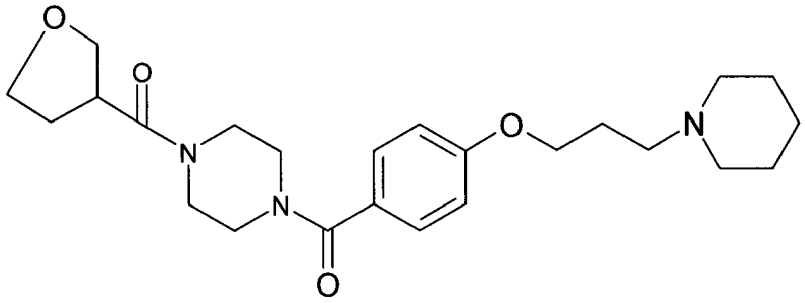
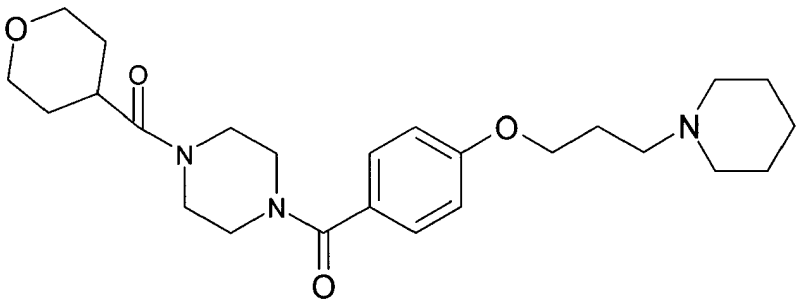
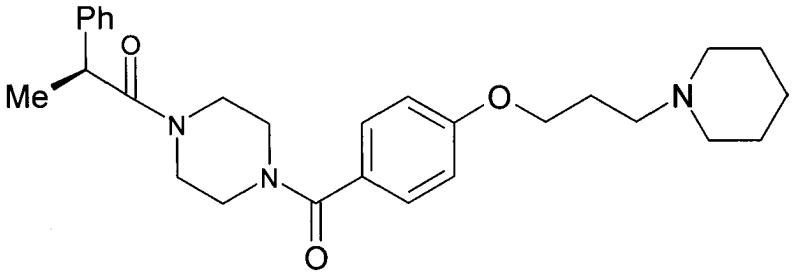


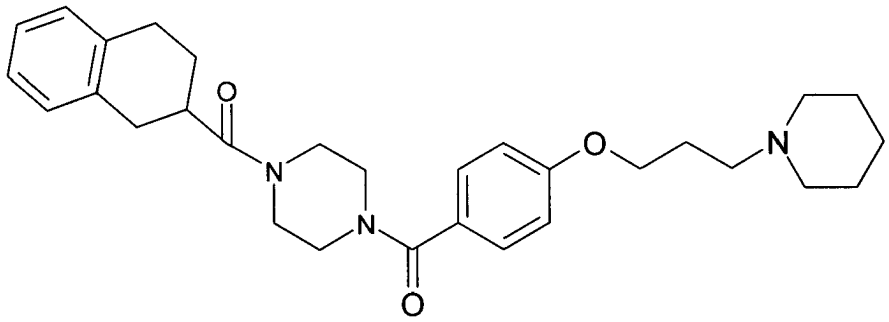
E96



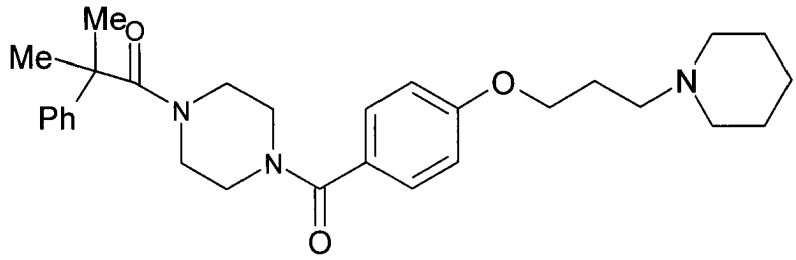
E97



E98



E99



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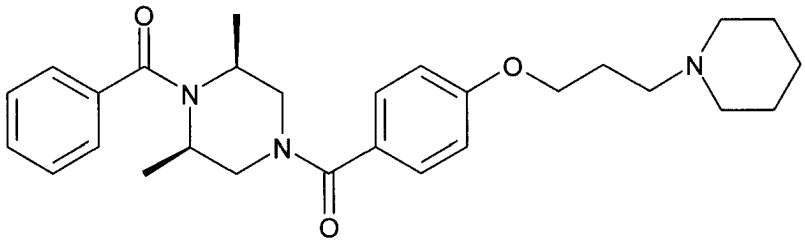

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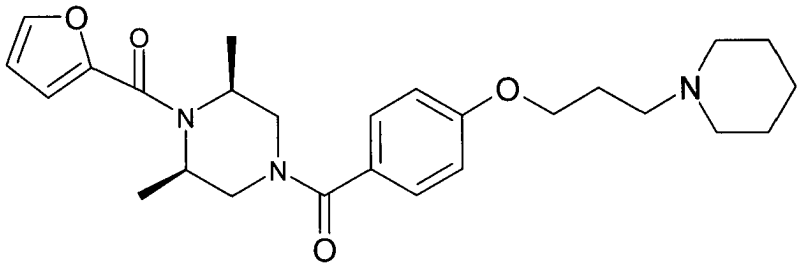
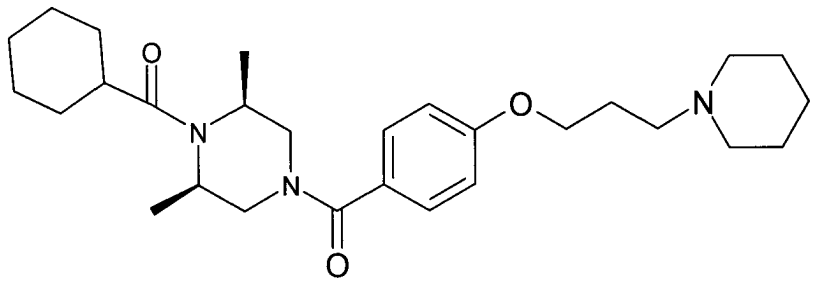
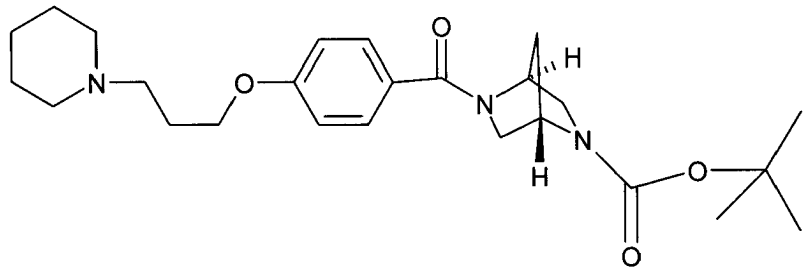


E102



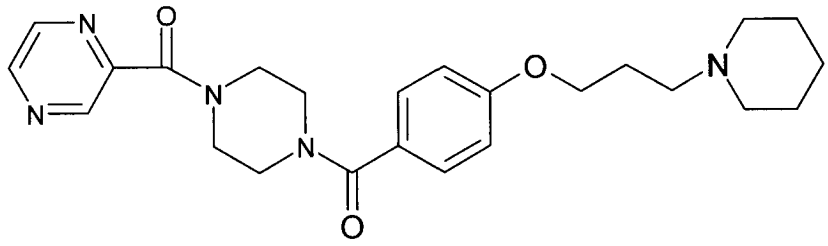
E103



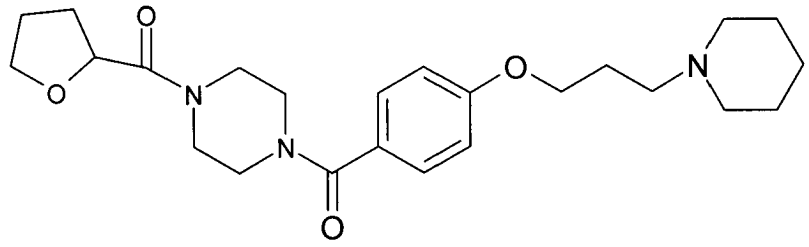
E104

(1S,4S)-2-[4-(3-Piperidin-1-ylpropoxy)benzoyl]-2,5-diaza-bicyclo[2.2.1]heptane dihydrochloride

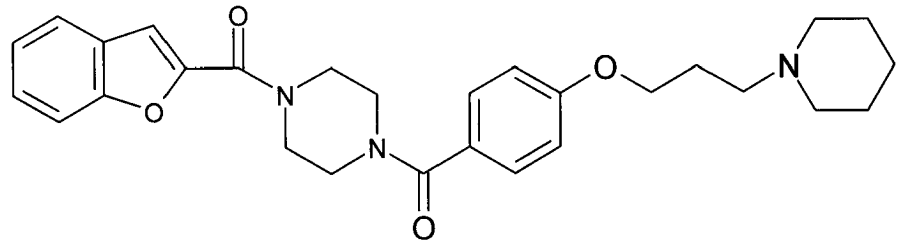
E105



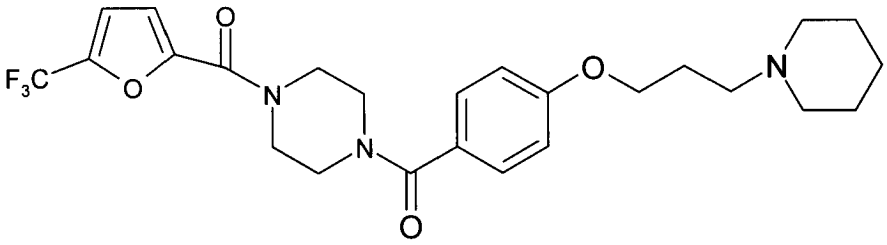
E106



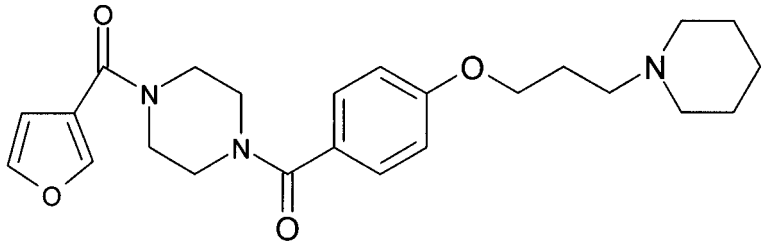
E107



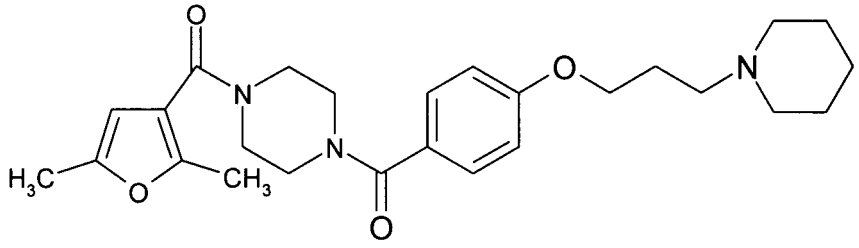
E108



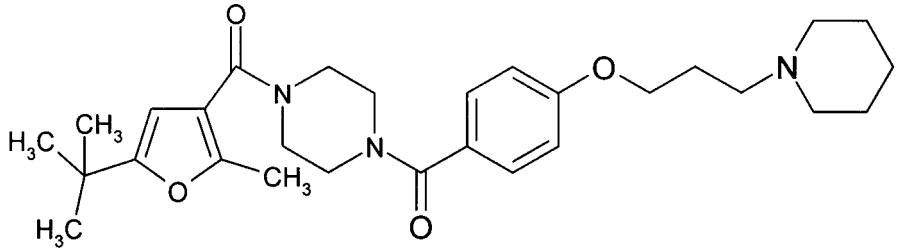
E109



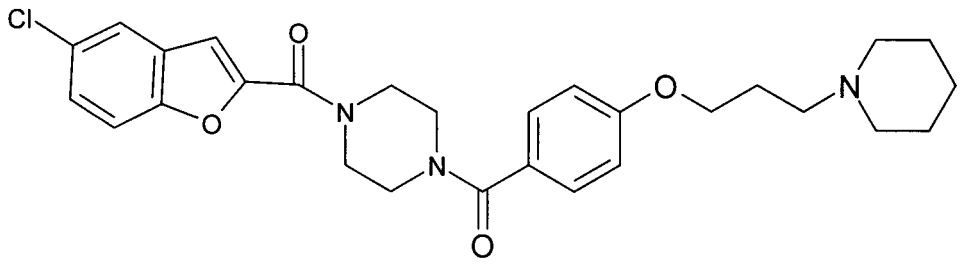
E110



E111



E112



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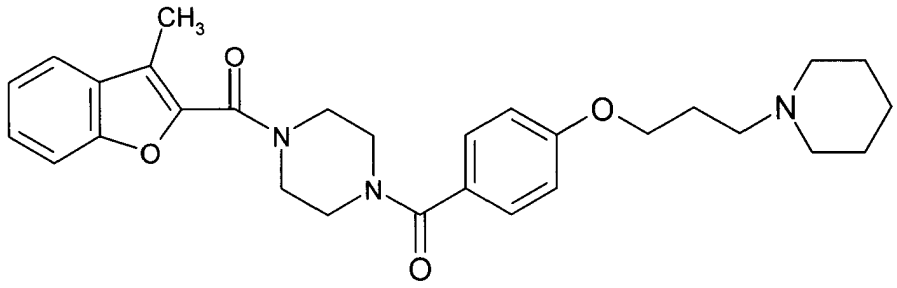

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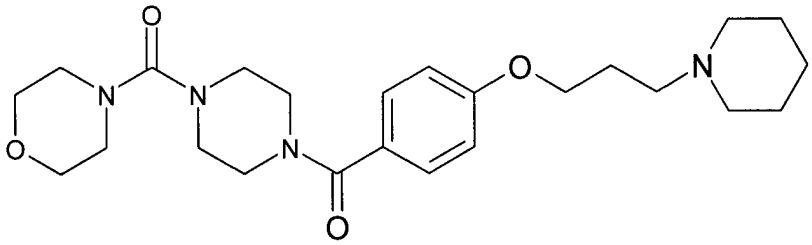
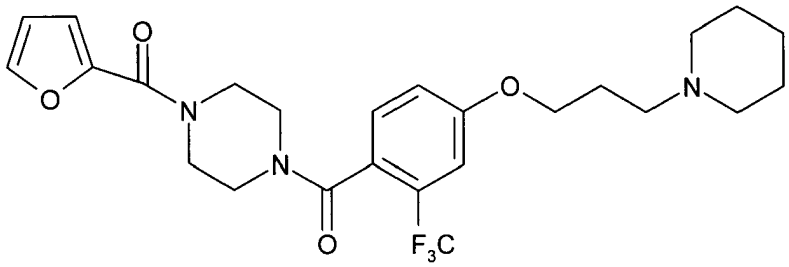
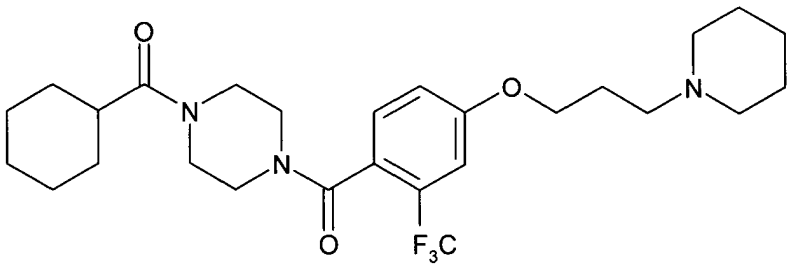


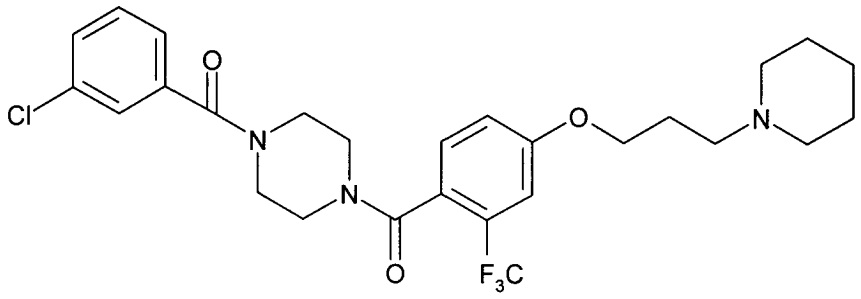
E115



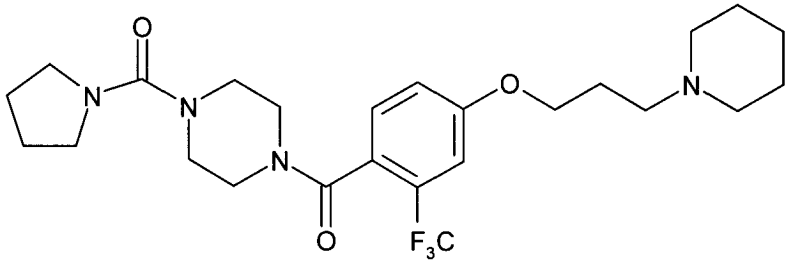
E116



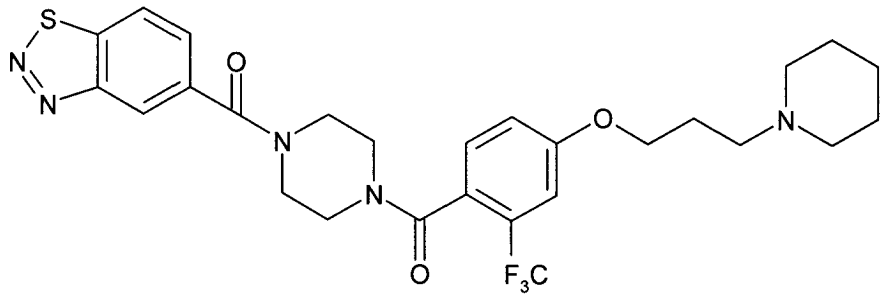
E117



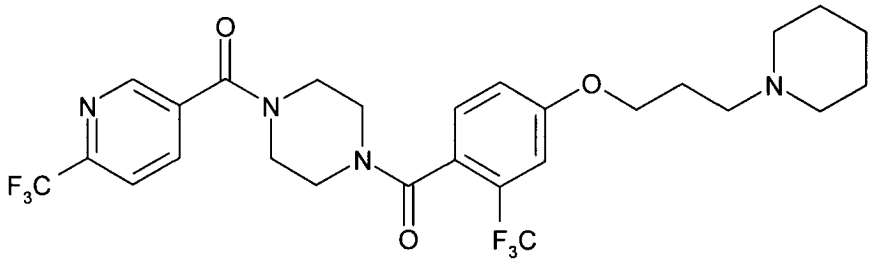
E118



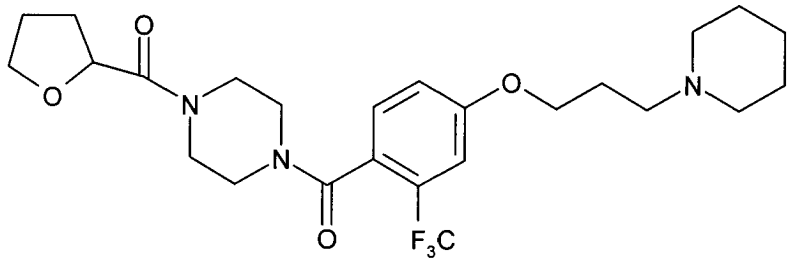
E119



E120



E121



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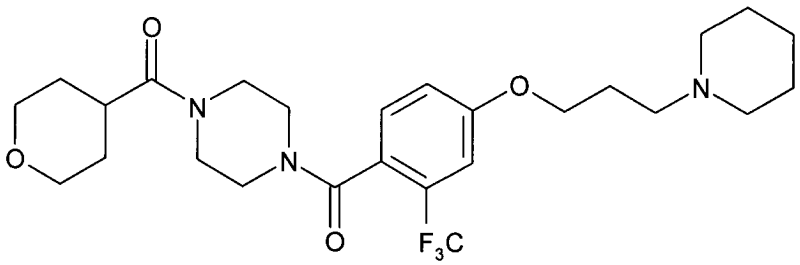

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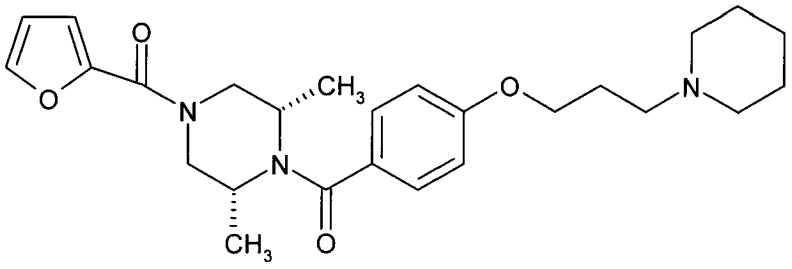
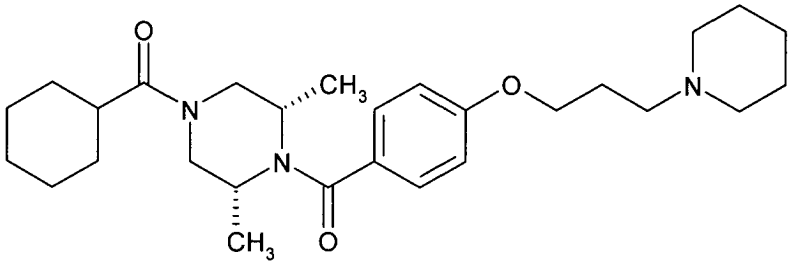


E124



or a pharmaceutically acceptable salt thereof.

3. (Currently Amended) A pharmaceutical composition which comprises the compound of ~~formula (I) as defined in~~ claim 1 or a pharmaceutically acceptable salt thereof and a pharmaceutically acceptable carrier or excipient.

4.-6. (Cancelled)

7. (Currently Amended) A method of treatment of ~~neurological diseases~~ Alzheimer's disease which comprises administering to a host in need thereof an effective amount of a compound ~~of formula (I) as defined in~~ claim 1 or a pharmaceutically acceptable salt thereof.

8. (Cancelled).